



MODULE NAME:	MODULE CODE:
ADVANCED INFORMATION TECHNOLOGY MANAGEMENT	AITM7312/d

ASSESSMENT TYPE:	REVISED EXAM
TOTAL MARK ALLOCATION:	120 MARKS
TOTAL TIME:	The time given to students to complete this assessment will be indicated on your module in <i>Learn</i>.

By submitting this assessment, you acknowledge that you have read and understood all the rules as per the terms in the registration contract, in particular the assignment and assessment rules in The IIE Assessment Strategy and Policy (IIE009), the intellectual integrity and plagiarism rules in the Intellectual Integrity Policy (IIE023), as well as any rules and regulations published in the student portal.

INSTRUCTIONS:

1. Please **adhere to all instructions**. These instructions are different from what is normally present, so take time to go through these carefully.
2. **Independent work is required**. Students are not allowed to work together on this assessment. Any contraventions of this will be handled as per disciplinary procedures in The IIE policy.
3. **No material may be copied from original sources, even if referenced correctly, unless it is a direct quote indicated with quotation marks.**
4. All work must be adequately and correctly referenced.
5. You should paraphrase (use your own words) the concepts that you are referencing, rather than quoting directly.
6. Marks will be awarded for the quality of your paraphrasing.
7. This is an open-book assessment.
8. Assessments must be typed unless otherwise specified.
9. **Ensure that you save a copy of your responses.**
 - a. Complete your responses in a Word document
 - b. The document name must be your **name.student number.Module Code**.
 - c. Once completed the assessment, upload your document under the **submission link** in the correct module in *Learn*.

Additional instructions:

- Instructions for assessments including numerical calculations
- Once completed the assessment, upload your document under the **submission link** in the correct module in *Learn*.

Referencing Rubric

Providing evidence based on valid and referenced academic sources is a fundamental educational principle and the cornerstone of high-quality academic work. Hence, The IIE considers it essential to develop the referencing skills of our students in our commitment to achieve high academic standards. Part of achieving these high standards is referencing in a way that is consistent, technically correct and congruent. This is not plagiarism, which is handled differently.

Poor quality formatting in your referencing will result in a penalty of a maximum of ten percent being deducted from the percentage awarded, according to the following guidelines. Please note, however, that evidence of plagiarism in the form of copied or uncited work (not referenced), absent reference lists, or exceptionally poor referencing, may result in action being taken in accordance with The IIE's Intellectual Integrity Policy (0023).

Markers are required to provide feedback to students by indicating (circling/underlining) the information that best describes the student's work.

Minor technical referencing errors: 5% deduction from the overall percentage – the student's work contains five or more errors listed in the minor errors column in the table below.

Major technical referencing errors: 10% deduction from the overall percentage – the student's work contains five or more errors listed in the major errors column in the table below.

If both minor and major errors are indicated, then 10% only (and not 5% or 15%) is deducted from the overall percentage. The examples provided below are not exhaustive but are provided to illustrate the error

<u>Required:</u> Technically correct referencing style	<u>Minor errors in technical correctness of referencing style</u> Deduct 5% from percentage awarded	<u>Major errors in technical correctness of referencing style</u> Deduct 10% from percentage awarded
<u>Consistency</u> <ul style="list-style-type: none"> The same referencing format has been used for all in-text references and in the bibliography/reference list. 	Minor inconsistencies. <ul style="list-style-type: none"> The referencing style is generally consistent, but there are one or two changes in the format of in-text referencing and/or in the bibliography. For example, page numbers for direct quotes (in-text) have been provided for one source, but not in another instance. Two book chapters (bibliography) have been referenced in the bibliography in two different formats. 	Major inconsistencies. <ul style="list-style-type: none"> Poor and inconsistent referencing style used in-text and/or in the bibliography/ reference list. Multiple formats for the same type of referencing have been used. For example, the format for direct quotes (in-text) and/or book chapters (bibliography/ reference list) is different across multiple instances.
<u>Technical correctness</u> <ul style="list-style-type: none"> Referencing format is technically correct throughout the submission. Position of the reference: a reference is directly associated with every concept or idea. For example, quotation marks, page numbers, years, etc. are applied correctly, sources in the bibliography/reference list are correctly presented. 	Generally, technically correct with some minor errors. <ul style="list-style-type: none"> The correct referencing format has been consistently used, but there are one or two errors. Concepts and ideas are typically referenced, but a reference is missing from one small section of the work. Position of the references: references are only given at the beginning or end of every paragraph. For example, the student has incorrectly presented direct quotes (in-text) and/or book chapters (bibliography/reference list). 	Technically incorrect. <ul style="list-style-type: none"> The referencing format is incorrect. Concepts and ideas are typically referenced, but a reference is missing from small sections of the work. Position of the references: references are only given at the beginning or end of large sections of work. For example, incorrect author information is provided, no year of publication is provided, quotation marks and/or page numbers for direct quotes missing, page numbers are provided for paraphrased material, the incorrect punctuation is used (in-text); the bibliography/reference list is not in alphabetical order, the incorrect format for a book chapter/journal article is used, information is missing e.g. no place of publication had been provided (bibliography); repeated sources on the reference list.
<u>Congruence between in-text referencing and bibliography/ reference list</u> <ul style="list-style-type: none"> All sources are accurately reflected and are all accurately included in the bibliography/ reference list. 	Generally, congruence between the in-text referencing and the bibliography/ reference list with one or two errors. <ul style="list-style-type: none"> There is largely a match between the sources presented in-text and the bibliography. For example, a source appears in the text, but not in the bibliography/ reference list or vice versa. 	A lack of congruence between the in-text referencing and the bibliography. <ul style="list-style-type: none"> No relationship/several incongruencies between the in-text referencing and the bibliography/reference list. For example, sources are included in-text, but not in the bibliography and vice versa, a link, rather than the actual reference is provided in the bibliography.
<u>In summary:</u> the recording of references is accurate and complete.	In summary, at least 80% of the sources are correctly reflected and included in a reference list.	In summary, at least 60% of the sources are incorrectly reflected and/or not included in reference list.

Overall Feedback about the consistency, technical correctness and congruence between in-text referencing and bibliography:

Question 1		(Marks: 10)
IT has enabled changes in organisations, and also presents challenges in the exploitation of IT.		
Q.1.1	Explain the following organisational features: <ul style="list-style-type: none"> • <u>Flatter, less hierarchical structures</u>; • <u>Globalisation</u>. 	(5)
Q.1.2	Analyse <u>user participation</u> as a challenge associated with exploiting ICT.	(5)

Question 2		(Marks: 10)
Technology managers need to be able to identify, evaluate and assess recent and emerging disruptive technologies and applications, and the opportunities and challenges arising from them.		
Q.2.1	Differentiate between <u>disruptive</u> technologies and <u>revolutionary</u> technologies, with the use of <u>examples</u> .	(6)
Q.2.2	Analyse how the <u>information economy</u> has enabled the development of disruptive technologies.	(4)

Question 3		(Marks: 10)
A major concern for IT practitioners has been how to fuse the capability of technology, systems and information with the needs and aspirations of the business, namely IT/IS alignment.		
Q.3.1	Discuss the concept of <u>strategic alignment</u> .	(4)
Q.3.2	There are five dimensions that need to be considered in <u>IT/IS alignment</u> . Summarise the <u>cultural</u> dimension .	(6)

Question 4**(Marks: 15)**

Consider the following excerpt about a South African SME:

Welcome to WeFix

Founded in 2006, WeFix has grown into a nationally known brand, respected as the most experienced Apple, Huawei, LG and Samsung repair and servicing provider in South Africa. We have over 11 years' experience in device repair, with stores nationwide. We're born fixers. We fix phones, tablets, smartwatches and Macs and things in-between. We do it fast and well and it gets us noticed. Why? Because we love to make it better.

Source: WeFix. 2020. [Online]. Available at: <https://wefix.co.za/> [Accessed 23 January 2020].

Q.4.1	Identify factors that <u>differentiate</u> an SME like WeFix from a larger organisation.	(6)
Q.4.2	Recommend the use of <u>Web 2.0</u> and <u>mobile technologies</u> for WeFix. Give examples that are relevant to their business.	(5)
Q.4.3	Determine possible <u>disadvantages</u> of <u>outsourcing</u> the development of a mobile app for WeFix.	(4)

Question 5**(Marks: 40)**

Consider the following scenario and then answer the questions that follow:

You have been appointed as IT manager at a well-established traditional retailer, tasked with the implementation of a new back-end system that is integrated with the organisation's global suppliers. The new system will significantly alter the ordering procedures and has been met with some resistance from the employees whose jobs will be impacted by the new system. However, this will enable the retailer to become more efficient and manage stock better, contributing to lower costs. Additionally, long-term supplier relationships should improve.

Q.5.1	Suggest two benefits related to your <u>global suppliers</u> that the new system could achieve.	(4)
Q.5.2	Discuss two reasons the organisation may be <u>resistant to change</u> .	(6)

Q.5.3	Differentiate between <u>tangible</u> and <u>intangible benefits</u> , with the <u>examples</u> from the scenario.	(8)
Q.5.4	Explain the <u>benefit realisation approach</u> as a benefits management technique you could use.	(7)
Q.5.5	Assess the following <u>leadership abilities</u> that will assist you in managing future IT systems for the retailer: <ul style="list-style-type: none"> • Ability to <u>recognise the maturity level of technology</u>; • Ability to <u>understand the nature and scope of technology discontinuities</u>. 	(8)
Q.5.6	Analyse <u>human behaviour and values</u> in an organisational culture that will inform your leadership.	(7)

Question 6**(Marks: 10)**

Consider the following extract, then answer the questions that follow:

The South African National Roads Agency Limited (SANRAL) E-Toll website was hacked, making the site vulnerable to release of personal details (Vermeulen, 2014). The aforementioned SANRAL E-Toll website came under a denial-of-service attack in 2012, but the attack was not successful (SANews, 2012). It is assumed this attack was conducted by hackers, given the ongoing controversy over the e-toll project.

Source adapted from: van Niekerk, B. 2017. *An analysis of cyber-incidents in South Africa*. [Online]. Available at: http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2077-72132017000100006 [Accessed 23 January 2020].

Q.6.1	Explain a <u>denial-of-service attack</u> as an IT security threat.	(4)
Q.6.2	Recommend and describe two <u>technical controls</u> that can be used as <u>countermeasures</u> to the security threats in the extract.	(6)

Question 7**(Marks: 25)**

Given the importance of IT governance, a number of frameworks have been developed to assist organisations in achieving effective and efficient governance.

Write a short report describing the COBIT framework. You can use the following headings in your report:

- Overview and Scope of COBIT;
- Key components;
- The benefits of using COBIT.

<u>Criteria</u>	<u>Points for Consideration</u>	<u>Marks</u>
Content of answer	<ul style="list-style-type: none"> • All main themes are covered; • Relevant theory is included; • Understanding demonstrated; • Critical thinking and analysis skills. 	/20
Sentence structure, grammar and spelling	<ul style="list-style-type: none"> • Use of headings • All sentences are well-constructed; • Clear meaning of sentences; • Spelling, grammar and punctuation. 	/5
	TOTAL	/25

END OF PAPER